

PUBLIC HEALTH ACT, 1875.

REPORT

FOR THE YEAR 1909,

BEING THE

35th Annual Report

ON THE

SANITARY CONDITION

OF THE

Trowbridge Urban Sanitary District.

PRESENTED TO THE

TROWBRIDGE URBAN DISTRICT COUNCIL

BY

JAMES PEARSE. M.D.,

Medical Officer of Health to the Trowbridge Urban Sanitary Authority

TROWBRIDGE :

B. LANSDOWN AND SONS, SILVER STREET

Medical Officer's Annual Report.

To the Chairman and Members of the Trowbridge Urban District Council.

GENTLEMEN,—

I have the honour to submit to you my eighth Report as your Medical Officer of Health.

The estimated population of the district in 1909 is 11,100, as compared with 11,526 at the census of 1901. The estimate is based on the reduction which took place during the previous decennium, and is probably considerably below the true figure. The industries in which the population is engaged are mainly cloth weaving, engineering, bacon curing, mattress making, railway service, brewing. The industry of the town has received a check during the latter part of the year owing to the closing of St. George's Foundry, which is the more to be regretted as there is need in the district for the employment of skilled artisans. Female labour is employed to a considerable extent in the mills, also in dress-making, and in the manufacture of ready-made clothing, and there is a considerable amount of home labour in glove making. No directly injurious effect of the conditions of labour on health has been noticed.

HOUSE ACCOMMODATION.

The conditions of the housing of the working classes are on the whole satisfactory, especially as regards the newer portions of the town, where there is ample sufficiency of air space and land. Some of the older portions of the town date back to a considerable period, and it is difficult to maintain these at the level of modern hygienic standards. But a much more continuous system of inspection has prevailed within the past few years, and efforts will be made to improve the conditions. Thirty-six new houses have been erected during the year. Builders are required to give notice to the Surveyor on the completion of the foundations, on the completion of the damp course, and on final erection. All new drains are tested by the Sanitary Inspector. A house to house inspection has been made during the year of the district in the neighbourhood of British Row,

Adcroft Street, Thomas Street, Charlotte Street, and sundry defects thus brought to notice have been remedied. The main point to which attention has been drawn has been the insufficient supply of water to many of the houses, and steps have been taken to improve this condition.

WATER SUPPLY.

The district is served by the Trowbridge Water Company, which was incorporated by Act of Parliament in 1875. This Company also supplies in addition to Trowbridge the Melksham Urban District, a portion of the Melksham Rural District, and a portion of the Westbury Rural District. Originally the water was drawn from the springs of the River Biss; now the source of supply is from adits driven into the chalk, and from a well sunk through the chalk into the lower greensand. A connection exists by which water from the Biss springs may still be used in case of emergency, but the Company states that this has not been done during the past three years. My last two reports have dealt fully with difficulties which have arisen in connection with the water supply, to which attention had been drawn owing to a slight outbreak of Enteric Fever in 1907. During the year under review there has been no outbreak of disease which could be considered of water-borne character. There has, however, been complaint from time to time as to recurring "muddiness" of the water, which certainly occurs more frequently than was formerly the case.

Samples of the water have been submitted for Chemical Analysis to Bristol Public Health Laboratory, and these were reported on as follows:—

	28th May, 1909.	6th September.
Appearance	Clear and bright	Bright and clear
Colour	Excellent	Light grey
Odour	Nil	Nil
Taste	Nil	Normal
Reaction	Faintly alkaline	
Total Solid Matter	25.48 grains per gall.	24.50
Hardness (Total)... ..	20.00 degrees	19.50
„ (Permanent)	4.00 degrees	5.20
„ (Temporary)	16.00 degrees	14.30
Chlorine	1.12 grains per gall.	1.10
Equal to Salt	1.84 grains per gall.	1.9
Nitrogen as Nitrites	Absent	Absent
Nitrogen as Nitrates	0.008 grains per gall.	.07
Ammonia Free or Saline	Absent	Nil
Ammonia Albuminoid ... ..	.007 parts per 100,000	.001
Oxygen consumed in four hours (T. 60° F.)	.025 parts per 100,000 An excellent sample of water	.022 A water of high organic purity

In October my attention was drawn by the County Medical Officer of Health to an unfavourable bacteriological report on some of the samples submitted to the Aylesbury Dairy Company from farms outside the District, but supplied by the Trowbridge Water Company. This contamination was considered by the Company to be due to local causes. A further sample was now taken from the town and submitted to the Clinical Research Association. Their bacteriological report was as follows :—

“Bacteriological.

Average number of organisms producing visible colonies
on gelatine plates, incubated at 20–22° C. for 3 days= 22 per c.c

Average number of organisms producing visible colonies
on agar plates, incubated at 37·5° C. for 2 days = 13 per c.c

B. Coli present in 10 c.c

Streptococci not found in 30 c.c

B. Enteritidis Sporogenes not found in 100 c.c

Conclusions.

The chemical results are satisfactory ; and the total number of organisms is small ; but the occurrence of colon bacilli, even in such comparatively small numbers as is here the case, points to a slight degree of pollution of animal origin.

Whilst the water can hardly be condemned on these results alone, and assuming that there is never any greater degree of pollution than the above figures indicate, yet we do not think that it can be considered to be in a satisfactory condition for distribution to the public without filtration ; and especially as there would not seem to be any evidence that under certain conditions, it may not be polluted to a greater degree.

It is possible that the pollution may be due to a small amount of surface water obtaining ingress to the well without adequate soil filtration ; and if so, the fault is probably easily remediable.

We have no information as to the depth of the well from which the supply is derived. This makes some difference to the number of colon bacilli which is usually regarded as clear evidence of sewage pollution ; but in any case we regard the number found as larger than can be considered satisfactory in a water used as a public supply without filtration.”

This report was submitted to the Water Company, and as a result of correspondence they agreed to investigate the source of supply in company with the County Medical Officer of Health and the local authority. At the time of writing this investigation

has only recently been held, and there has not yet been opportunity for considering any full report by the Company. Further comments must, therefore, be deferred, but I desire to state that there is no necessity for alarm from present analyses, which do, however, indicate the necessity for careful examination as to the possibilities of pollution, so that future risk may be avoided. The Water Company has, so far, met the wishes of the Council in this matter, and it is much to be hoped that a solution, satisfactory to both parties may be arrived at.

One well in Mortimer Street has been closed during the year.

MILK SUPPLY.

There are 44 Dairies and Cowsheds on the register. Systematic inspection of Cowsheds is made both by the Sanitary Inspector and myself, and the result has been a marked improvement in the conditions of cleanliness during recent years. Some of the occupiers co-operate willingly in the requirements made, keeping sheds and yards clean and exercising care at the time of milking. Others still require a frequent serving of notices to ensure the removal of manure from the vicinity of the sheds. In one of the largest sheds of the district this is removed to a distance *daily*, and it is difficult to see why others cannot adopt the same course. The large milk companies are now stringent in their requirements, and send their own Inspectors to report on the farms supplying milk, so that valuable co-operation is received in this way.

There are few Retail Dairies or Milkshops in the district, most of the milk for local sale being sent direct from the farms.

The district contains a branch of the Wilts United Dairy Company, whence milk is conveyed to various parts of the Kingdom, and where the manufacture of dried milk is carried on. Milk is also sent to the Anglo Swiss Company at Staverton.

No action has been taken as regards tuberculous cattle.

OTHER FOODS.

There are twelve Slaughterhouses on the Register, which receive regular inspection. The manufacture of bacon, etc., is one of the local industries; the conditions under which the various products are produced have been found to be satisfactory. Considerable structural alterations have been carried out during the year at Messrs. Bowyer and Philpott's Factory as the result of representations made, and the conditions have thereby been much improved.

The administration of the Sale of Food and Drugs Act is under the County Council.

No action has been taken during the year under Section 117 of the Public Health Act, 1875. One tubercular bovine carcase has been destroyed with the consent of the owner.

Systematic inspection at the time of slaughtering is not carried out by the Authority, but I am aware that supervision is exercised by firms concerned in the bacon trade.

The Inspector does not hold a special certificate in meat inspection, but is taking steps to obtain this.

SEWERAGE AND DRAINAGE, Etc.

As a result of work done in recent years the district is now efficiently sewered. A separate system exists for the removal of surface water and road detritus apart from foul sewage.

The Sewage Disposal Works have been in operation since 30th September. Unfortunately an action is pending in the High Court on the question of the former injunction, so I refrain from further comment on this matter. But it is to be hoped that the question of pollution of the river by sewage has now been satisfactorily met.

There are no privies in the district, but the water carriage system prevails. In a large number of cases the flushing of w.c.'s is done by hand; but to all new houses a flushing cistern must be provided. A few earth closets exist on the confines of the district, as in Holbrook Lane, Silver Street Lane, and the extremity of Upper Studley.

HOUSE REFUSE.

This is removed from the business part of the town daily; from the outlying parts twice weekly. The refuse is tipped on ground at Southwick.

NUISANCES.

A large number of varied nuisances have been dealt with during the year, and these are tabulated in an appendix to this report, prepared by the Sanitary Inspector.

SPECIAL BYE-LAWS.

No special Bye-Laws exist as to houses let in lodgings, offensive trades, etc. But application has been made for the adoption of the following Sections of the Public Health Acts Amendment Act, 1907:—

Section 43.—For the purpose of dealing with sanitary conveniences “so placed or constructed as to be a nuisance or offensive to public decency.”

Section 49.—For the provision of sinks for the purpose of carrying off refuse water.

Section 51.—For the purpose of further defining “offensive trades,” especially as regards rag-picking, which has been found to be sometimes carried on in occupied houses.

Section 53 54, 57, 59, 61, 65.—For the better dealing with infectious disease.

Part V dealing with Common Lodging Houses.

Sanction for the adoption of these Sections has not yet been received.

COMMON LODGING HOUSE.

There is one Common Lodging House in the district, situated in Shail's Lane, and licensed for 48 inmates. It is seldom fully occupied. The building is an old one, and requires considerable supervision to keep it in suitable repair. Frequent inspection is made by the Sanitary Inspector and myself, and considering the circumstances of the building we have found the conditions to be on the whole satisfactory.

SCHOOLS.

The number of elementary scholars in the district is 1,856, with an average attendance of 1,661. In my last report I stated that the attention of the Managers had been drawn to sanitary defects existing at St. James' Parochial Schools, Trinity Schools (Boys' and Infants'), Adcroft Schools. The necessary alterations have been carried out at St. James Schools in a very satisfactory manner; the conditions at Trinity Schools have been much improved. At Adcroft Schools nothing has yet been done; this is due to the fact that during the year these schools have been handed over to the County Council, who contemplate other alterations in the structure, and the sanitary alterations cannot be effected pending the decision regarding these. The attention of the County Council has been called to the delay.

All schools are supplied with water by the Trowbridge Water Company.

During the prevalence of infectious disease visits are paid to the schools from time to time for the purpose of detecting any missed cases and of giving instructions to teachers. It has not been found necessary to close any of the schools during the year on account of infectious disease.

Last year I was able to report on the question of Medical Inspection of School Children from personal knowledge of the work, but during the past year this has been carried out by officials of the County Council.

I am indebted to the courtesy of the School Medical Officer for the following tabulated result of the Inspection of Trowbridge Schools during 1909 :—

SUMMARY OF RESULTS OBTAINED BY THE MEDICAL EXAMINATION OF CHILDREN IN THE TROWBRIDGE URBAN DISTRICT—1909.

		Number Examined.	Dirty and Insufficient Clothing.	Bad Footgear.	Nutrition.	Dirty and Verminous Condition.	Ringworm and other Skin Diseases.	More than Four Decayed Teeth.	Nose and Throat.	Eye Diseases and Defective Vision.	Ear Diseases and Defective Hearing.	Defective Speech.	Very Dull and Mentally Defective.	Heart and Lungs.	Nervous Disorders.	Tubercle.	Rickets and Deformities.	Hernia.
BOYS'	...	240	17	19	9	7	4	14	12	40	19	2	3	2	2	—	7	2
GIRLS'	...	228	9	7	6	47	5	14	14	32	5	1	1	3	2	—	—	—
TOTAL	...	468	26	26	15	54	9	28	26	72	24	3	4	5	4	—	7	2

INFECTIOUS DISEASE.

The number of cases notified during 1909 and the preceding years is shown in the following table :—

	1909.	1908.	1899–1908.
Diphtheria	26	54	25·2
Erysipelas	5	5	10·
Scarlet Fever	22	18	34·
Enteric Fever	—	6	2·6
Puerperal Fever	2	1	1·

Diphtheria.

Diphtheria shows a considerable diminution compared with last year. There has been no epidemic outbreak of the disease, but a continuous slight prevalence. The notifications have occurred in January, 1 ; February, 2 ; March, 3 ; May, 1 ; June, 2 ; July, 2 ; August, 5 ; September, 1 ; October, 5 ; November, 1 ; December, 3. The cases have not been confined to one part of the town, nor to one school. Six cases occurred in one family, the first child not having received medical attention until five

days after the onset of the disease ; in no other instance was there an infected case in a second house. Two cases terminated fatally.
Scarlet Fever.

Scarlet Fever maintains much the same incidence as it has shown during the past three years. This disease appears to break out in a violent form every few years, and to maintain a continuous slight prevalence in the intervals. Thus there were serious epidemics in 1890 and 1891, again in 1898, and again in 1905. During the present year there was a slight outbreak in May and June and early July, accounting for twelve cases ; there was no further occurrence till the end of November, when five cases were notified, but four of these were in one family and were probably contracted out of the town, as was the fifth case. There has been no fatality from the disease, and its type for many years past has been extremely mild.

Twenty-four cases of Diphtheria and twenty-one of Scarlet Fever have been removed to the Joint Isolation Hospital during the year. The care which the patients receive, combined with the hygienic surroundings of the Hospital, tend to a more speedy and permanent convalescence than would be the case in many instances were the Hospital not available.

All cases notified are enquired into by the Sanitary Inspector, and a report prepared as to home conditions, work or school attendance, milk supply, etc. Disinfection of infected rooms is carried out by means of Formalin Vapour.

TUBERCULOSIS.

No system of voluntary notification is in force. Under a recent order of the Local Government Board cases of this disease coming under the cognisance of Poor Law Medical Officers are now notified. Four such cases have been reported. The home conditions of such cases are enquired into, and a printed card of instructions as to personal hygiene and the prevention of infection is issued. One bed is maintained by voluntary contributions in the Winsley Sanatorium for Consumption ; otherwise no special hospital accommodation exists.

VITAL STATISTICS.

The estimated population to the middle of 1909 is 11,100. At the census of 1901 the figure was 11,526.

There were registered during the year 241 births, 113 of males, 128 of females. The birth-rate per 1,000 of the population is 21·6. The corresponding figures for last year were 278 and 24·9 ; and the average for the last ten years 247·7 and 23·3.

There were registered as occurring in the district 147 deaths, an annual rate per 1,000 of 13·2; the corresponding figures for last year were 156 and 13·9, and the average for the previous decennium was 160·2 and 13·7. This is the crude death-rate. But there were 14 deaths of residents from the district in the Union Workhouse, 5 in the County Asylum, 5 in Bath Royal United Hospital, while there were five deaths of non-residents in the Isolation Hospital; so that the corrected total number of deaths is 166, and the death-rate 14·9.

The birth and death-rates for England and Wales during the year were 25·6 and 14·5.

Of the 166 deaths 72 were of people over 65 years of age, of whom 25 were upwards of 80 years. Twenty-three of the total deaths are attributed to senile decay, so that it may perhaps be said that the commonest cause of death in Trowbridge is old age.

An appended table gives the causes of death, and the age periods at which death occurred.

INFANT MORTALITY.

The number of deaths of infants under 1 year of age was 19, giving an annual rate per 1,000 births of 78·8. The corresponding figures for last year were 33 and 118·7, and for the previous decennium 24·3 and 97·3; so that there has been a very satisfactory diminution, and the present figure is lower than it has been for many years.

The registered causes of death have been:—Enteritis 1; Gastritis, 1; Premature Birth, 8; Congenital Defects, 1; Atrophy, 3; Convulsions, 2; Pneumonia, 2; Suffocation, 1.

FACTORY AND WORKSHOPS ACT, 1901.

There are in the district 123 Workshops and Workplaces. These receive systematic inspection, and there is little cause for complaint as to their condition. No cases of overcrowding have been noted. Eleven notices have been served for want of cleanliness, and one for insufficient sanitary accommodation.

The Public Health Acts Amendment Act is in force in the district.

There are in the district 18 retail bakehouses, none underground.

RAINFALL.

I am indebted to Dr. Tayler for observations made at Lovemead House.

		1909.		1908.
January	..	·99	inches	1·33
February	..	·61	..	1·15
March	..	3·29	..	2·8
April	..	1·54	..	2·21
May	..	1·19	..	1·5
June	..	3·06	..	·54
July	..	2·29	..	2·35
August	..	2·51	..	3·67
September	..	3·27	..	2·09
October	..	4·73	..	1·63
November	..	72	..	1·16
December	..	3·93	..	2·52
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		28·13		22·98

Appended to my Report is a Summary of the work done in the Sanitary Inspector's Department by Mr. Allen, to whose willing assistance at all times I am much indebted.

I have the honour to be, Gentlemen,

Your obedient servant,

JAMES PEARSE, M.D.,

Medical Officer of Health.

Trowbridge, *

February, 1910.

SANITARY INSPECTOR'S OFFICE,
MARKET HOUSE CHAMBERS,
TROWBRIDGE.

TO THE CHAIRMAN AND MEMBERS OF THE
TROWBRIDGE URBAN DISTRICT COUNCIL.

GENTLEMEN,—

I have the honour to submit to you a Summary of the work done in my Department during the twelve months ended 31st December, 1909.

Summary of Work Done.

INSPECTIONS :—

HOUSES :							No.
(a)	House to House Inspections	..	..	..	..	282	760
(b)	Houses Inspected due to Infectious Disease	..	..	..	..	48	
(c)	Other Houses Inspected	..	..	..	..	299	
(d)	do. do. Homes of Outworkers	..	..	..	..	131	
	Slaughter Houses	..	..	..	..	..	64
	Lodging-house	..	..	..	..	..	15
	Cowsheds, Dairies, and Milkshops	..	..	..	..	..	129
	Workshops and Factories	..	..	..	..	..	198
	Stables	..	..	..	..	..	45
	Pigstyes	..	..	..	..	..	37
	Poultry Pens	..	..	..	..	..	5
	Fried Fish Shops	12
	Petroleum Stores	43
	Miscellaneous	39

VISITS :—	Total	1347
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<i>Re</i> Abatement of Nuisances	453
Other Visits	71

Total	524
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Zymotic enquiries into cases of Infectious Diseases :

Diphtheria	23	49
Scarlet Fever	22	
Erysipelas	..	..	1	
Pulmonary Tuberculosis	..	..	2	
Puerperal Fever	..	..	1	
Rooms Disinfected after Infectious Disease	..	..	..	33
Patients removed to Hospital	..	Diphtheria	21	42
		Scarlet Fever	21	

Bedding Disinfected (lots)	52
Bedding Destroyed (lots)	1
Total Number of Nuisances and Contraventions of the Public Health Acts, Bye-laws, Cowsheds, and Dairies Orders and Regulations, etc., recorded ..	434
Number of Samples of Water taken for Analysis ..	3
Number of Wells closed	1
Number of lots of Food-stuffs destroyed with consent of owner	2

NUMBER ON THE VARIOUS REGISTERS :—

1. Slaughter Houses	12
2. Lodging-house	1
3. Workshops :—	
Domestic Workshops	11
Retail Bake-houses	18
Other Workshops	90
Workplaces	4
4. Cowsheds and Dairies and Milkshops :—	
Cowkeepers	19
Cowkeepers and Purveyors of Milk	4
Cowkeepers, Dairymen, and Purveyors of Milk	1
Dairymen and Purveyors of Milk	3
Purveyors of Milk	17
5. Petroleum	9
6. Calcium Carbide	4

Nuisances *re* House Inspection :—

Defective drains	39
Choked drains	23
Defective drain traps	61
Defective w.c.'s	107
W.C.'s opening directly on Highways	3
Insufficient flushing to w.c.'s	2
Accumulation of offensive matter	21
Insufficient ventilation of w.c.'s	2
Defective flushing cisterns to w.c.'s	2
Insufficient flushing to urinals	2
Insufficient water supply	5
Overcrowding	4
Dilapidations	8
Insanitary cesspools	1
Defective rain gutters	10
Want of limewashing	14
Defective ventilating shafts	4
Improper waste pipe connections	4
Defective soil pipes	3

Defective fresh air inlets	..	..	..	..	2
Insanitary yards	..	..	..	..	5
Defective roofs	..	..	..	..	3
Defective stables	..	..	..	..	5
Houses closed as unfit for human habitation	..				2
					—
Total					332

Besides the above 7 new water closets have been provided. —

Nuisances *re* Workshops Inspection :—

Want of limewashing	..	..	..	..	14
No w.c. accommodation	..	..	..	..	1
Accumulation of manure	..	..	..	..	1
Defective ceilings	..	..	..	..	2
					—
Total					18

Miscellaneous Nuisances :—

Accumulation of manure, &c.	..	..	..	..	21
Accumulation of bones	..	..	..	..	1
Insanitary dung pounds	..	..	..	..	2
Defective stable floors	..	..	..	..	4
Insufficient drainage to pigstyes	..	..	..	..	5
Nuisance from fried fish shops	..	..	..	..	1
Foul ditches	..	..	..	..	2
Animals kept so as to be a nuisance	..	..	..	..	6
Defective stable drains	..	..	..	..	2
Lodging-house, want of limewashing	..	..	..	..	1
Nuisance from offal destroyer	..	..	..	..	3
Nuisance from water gas plant	..	..	..	..	2
					—
Total					50

Contraventions of Cowsheds and Dairies Orders and Regulations.

1. COWSHEDS :—

				No.	
Want of limewashing	..	..	..	10	All limewashed
Defective drainage	..	..	..	1	Drain relaid
Insufficient drainage	..	..	..	1	New drain laid
Insufficient lighting	..	..	..	1	Proper windows provided
Accumulation of manure	..	..	..	8	Manure removed
Require cleansing	..	..	..	8	Cleansed
Pigs kept so as to be a nuisance	..	..	..	1	Pigs removed

2. PREMISES OF PURVEYORS OF MILK :—

Want of cleanliness and limewashing ..	2	Cleansed and lime-washed
Defective trap	1	Made sound
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The few matters outstanding at the end of the year are receiving attention.

A large amount of work has again been done on verbal notification, and only in a few cases has it been necessary for me to ask for statutory notices to be served for the abatement of nuisances.

In all, 315 notices have been given, and the number outstanding is 21.

I am, Gentlemen,

Your Obedient Servant,

WILLIAM HY. ALLEN.

CAUSES OF, AND AGES AT, DEATH DURING YEAR 1909.

TROWBRIDGE URBAN DISTRICT.

CAUSES OF DEATH.	Deaths at the subjoined ages of "Residents" whether occurring in or beyond the District.							1908
	All ages.	Under 1 Year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upward.	All Ages.
Measles ... ..	..	..	..	..	..	..	..	2
Whooping Cough ... ..	..	..	..	..	..	..	..	4
Diphtheria (including Membranous Croup) ...	2	..	..	2	..	..	..	5
Enteric Fever ... ..	..	..	..	..	..	..	..	2
Epidemic Influenza ... ..	..	..	..	..	..	..	..	5
Diarrhœa	4	..	3	..	..	1	..	2
Enteritis	2	1	1	..	..	..	..	2
Gastritis	1	1	..	..	..	..	..	..
Puerperal Fever	1	..	..	..	1	..	..	..
Other Septic Diseases	2	..	..	..	..	2	..	1
Phthisis	12	..	..	..	5	6	1	10
Other Tuberculous Diseases	1	..	..	1	..	..	..	2
Cancer, Malignant Disease	14	..	..	..	..	11	3	13
Bronchitis	14	..	..	..	..	2	12	16
Pneumonia	7	2	1	1	1	2	..	9
Pleurisy	1	..	..	..	..	..	1	..
Other Diseases of Respiratory Organs ...	2	..	..	..	..	1	1	3
Alcoholism (Cirrhosis of Liver)	1	..	..	..	..	1	..	2
Premature Birth	8	8	..	..	..	..	..	7
Diseases and Accidents of Parturition ...	..	..	..	..	..	..	..	2
Heart Diseases	27	1	..	1	..	12	13	29
Accidents	5	1	..	..	1	1	2	3
All other causes	62	5	1	..	2	16	38	62
All causes	166	19	6	5	10	55	71	175